

KAAVISH-2024 FABIB VERSE AN MULTIPLAYER PLATFORM FOR COMBATING ISOLATION



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INTRODUCTION

Student isolation has slowly been becoming a pressing concern in Habib University with factors limited communication, overwhelming exposure to university life, and packed schedules contributing to a sense of disconnect within the community.

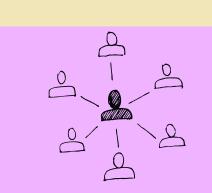
To combat student isolation, our team has devised a multiplayer game known as Habib-Verse centered around a cartoonish rendition of Habib's campus. The approach of using gamification by means of in-game activities is appropriate because it makes the overall student experience not only relatable but enjoyable as well.

MOTIVATIONS



REDUCED FEELINGS OF ISOLATION **FOCUS**

Student isolation is becoming an increasing concern at Habib University. We conducteed a survey and found out a large number of students felt isolated at Habib University specially during their first semester



ENHANCED SOCIAL CONNECTIONS

Through our game we want to foster meaningful social interactions and strengthen community bonds among students on a virtual campus.



VIRTUAL CAMPUS ON THE GO

Students can explore and connect with Habib University's campus anytime, anywhere through our immersive, virtual game environment

RELATED WORK

WORK RELEVENAT TO OUR PROJECT

VIRTUAL CAMPUS AS A FRAMEWORK FOR EDUCATIONAL AND SOCIAL ACTIVITIES

VIRTUAL CAMPUS FOR INTERNET **LEARNING**

CAMPUS METAVERSE FOR SOCIAL GOOD FOCUS

TECH STACK

UNITY ENGINE UNIVERSAL RENDER PIPELINE (URP) C# PROGRAMMING NETCODE FOR GAMEOBJECTS PROBUILDER

CINEMACHINE **NAVMESH**

DESIGN

CHARACTER SELECTION SYSTEM

Slimes have several characteristics that make them appealing to audiences. This is why we have created a character selection system where players can create slimes according to their own taste. Through this system players will be able to maintain their uniqueness but also find relatable elements in other players easily.



Fig 1. Character Custimozation Screen

FREEROAMING MODE

If players just want to free-roam the campus, they have the option of joining a map with the players they meet. They can collect and throw boomerangs at each other, absorb items such as food for sprinting stamina, roll down slides, jump on trampolines, or find hidden items that can significantly increase their slime's size. Players can communicate through the chat interface.



Fig 2. Free Roam Mode

TREASURE HUNT MODE

When entering the map, players will receive a task in the form of a hint. This hint will indicate a location on a map that holds another hint or the treasure itself. Players will then have to collaborate to find the glowing treasure on the map under a specified time else they lose and the trail will disappear. Each treasure will contain information on campus life which students often do not know.

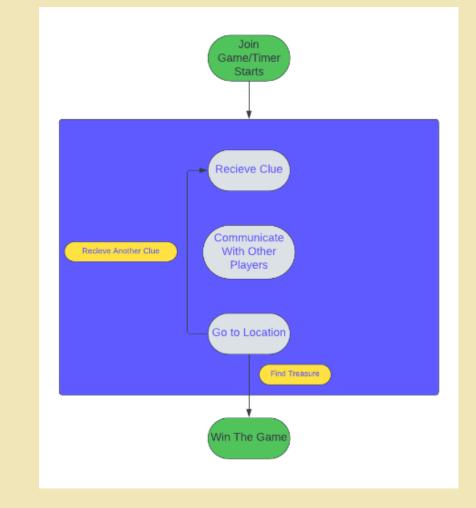
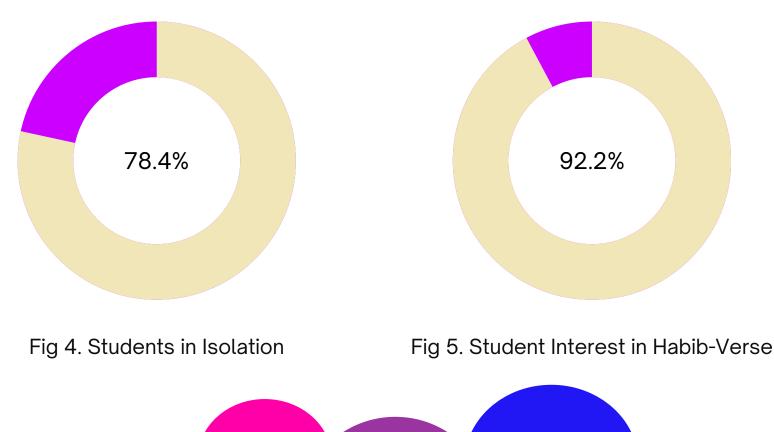


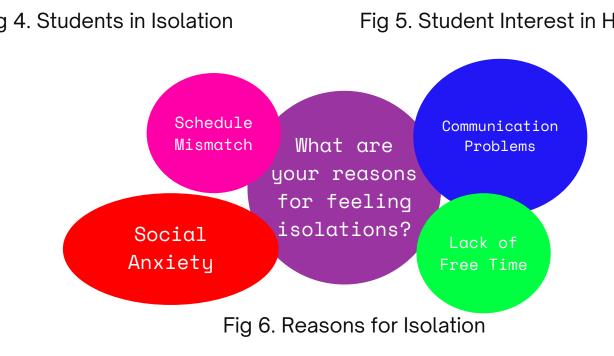
Fig 3. Treasure Hunt Core Loop

EXPERIMENTS AND RESULTS

ISOLATION IN HABIB UNIVERSITY

A Google form titled "Enhancing Society FYP Initiative" aimed to gather insights into how students spend their free time, their preferred leisure activities, and if they've ever experienced moments of isolation during their time on campus in order to guide the development process.

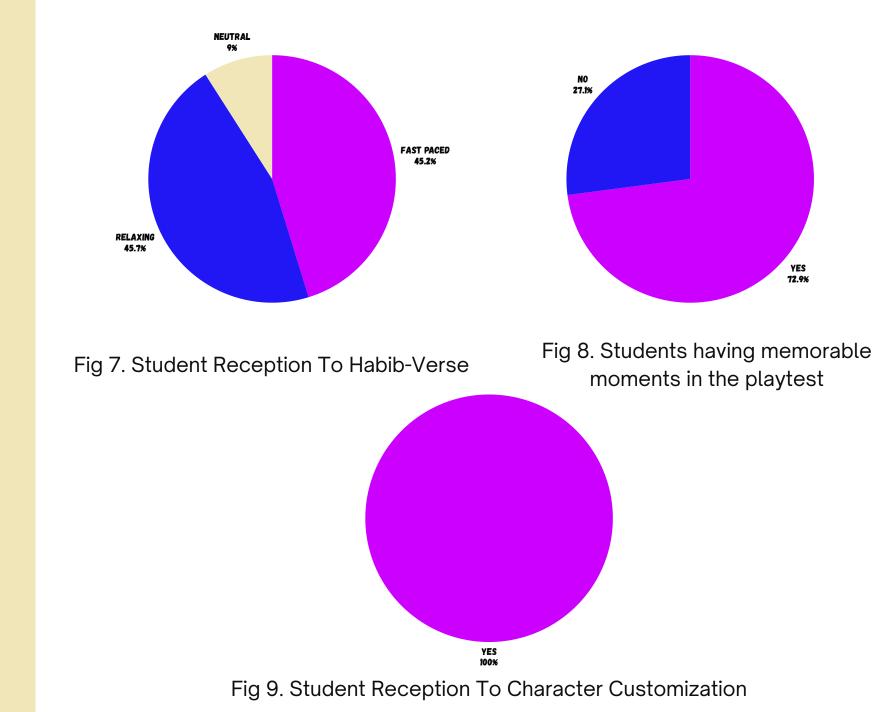




PLAYTEST DEMO

Playtesting is a crucial step in game development, allowing us to identify and address issues before the final release. Our playtest aimed to comprehensively evaluate the user experience of Habib Verse, a game designed to help new university students adjust to campus life and connect with peers and to address student isolation at Habib University. We focused on the following key areas:

CHARACTER CUSTOMIZATION AND IDENTITY SOCIAL INTERACTION AND RELAXATION PLAYABILITY AND ENGAGEMENT



CONCLUSION

Feelings of isolation among students is a very important issue to address. Isolation was most apparent among students who lacked communication skills as a result of difference in cultures, language barriers and lack of free time. The consequences of such isolation not only were harmful to a student's academic experience but their overall university experience.

As a result, our game's goal of eliminating isolation through gamified interactions became all the more relevant as it leveraged the university experience and provided an easy access to these interactions on the go. The design of Habib Verse revolved around two core gameplay modes and a character customization system that allowed players to create unique characters and make meaningful bonds.

FUTURE WORK

As the project develops it can be further enhanced through more community-oriented activities for students of all batches and can even be a official virtual student orientation. The potential of this platform extends well beyond a single university's precincts. Its adaptability shines, making it a viable solution for other academic institutions seeking similar platforms for their students that can be tailored to their environments. Further enhancements could see its adoption in different high-stress situations and crucial life transitions. Whether it's acclimating to a new job environment during corporate onboarding or finding familiarity in an unknown city, the platform offers a sense of grounding.

References:

Duan, H., Li, J., Fan, S., Lin, Z., Wu, X., & Cai, W. (2021). Metaverse for Social Good: A University Campus Prototype. In Proceedings of the 29th ACM International Conference on Multimedia (MM '21). https://doi.org/10.1145/3474085.3479238

Fominykh, M., Prasolova-Førland, E., Morozov, M., & Gerasimov, A. (2008). Virtual Campus as a Framework for Educational and Social Activities. Program for learning with ICT, Norwegian University of Science and Technology.

https://www.researchgate.net/publication/228951003_Virtual_Campus_as_a_Framework_for_Educational_a

nd_Social_Activities

